

SOFT ICE CREAM MACHINES USER MANUAL

Please read this manual carefully before using.

CONTENTS

● GENERAL INFORMATION

1. Announcement	Page.03
2. Information to the user	Page.03
3. General data	Page.03
4. Machine Assembly Identification	Page.04
5. Control Panel Demonstration	Page.08
6. Operation Condition	Page.10
7. Noise	Page.10

● INSTALLATION

1. Room Conditions	Page.10
2. Electricity Connection	Page.10
3. Accessories Installation	Page.11

● OPERATION INSTRUCTION

1. Processes before the First Operation	Page.13
2. Trial Running	Page.13
3. Ice Cream Production	Page.14

● CLEANING & SANITIZING

1. Cleaning	Page.16
2. Daily cleaning	Page.17
3. Sanitize and clean the beater assembly	Page.18
4. Clean the machine shell	Page.18
5. Clean the drip tray and drip pan	Page.18

● OPTIONAL FUNCTIONS

1. Keep-fresh System (Pre-cooling System)	Page.18
2. Air Pump System	Page.20
3. Counter	Page.20
4. Mixture alert instruction	Page.21
5. Rainbow	Page.21
6. Temperature display	Page.22

● **TROUBLESHOOTING**

1. Analysis table (1) -----	Page.23
2. Analysis table (2) -----	Page.24

● CIRCUIT DIAGRAM -----	Page.25
--------------------------------	---------

● ACCESSORIES PACKAGE -----	Page.28
------------------------------------	---------

GENERAL INFORMATION

1. Announcement

Our company carries out a continuing research, toward further development and improvement.

Therefore, the information found in the manual is subject to change without further notice.

All technical data, pictures and drawings contained in this manual are not binding on the manufacturer, nor can the manufacturer be held liable for any modifications to the machine in whole or in part.

2. Information to the user

For any explanation and information regarding the machine, its spare-parts or how to operate it, the manufacturer of the machine will be available if any questions should arise.

If any problem should occur, please contact our local distributor or the manufacturer if no distributor is available.

3. General data

All series of soft ice cream machines can be used for production and distribution for two or a mixed flavored soft ice cream.

The equipment applies the technology from several patents that gained, such as the unique evaporation cooling technique and the digital control system of the machine. The machine is fitted with an electronic control temperature and consistency adjustment system by which the hardness level of the ice cream can directly be chosen as per person favor. The operative condition can also be seen in a real-time display for a clear indication from the indication lights that the machine is working properly.

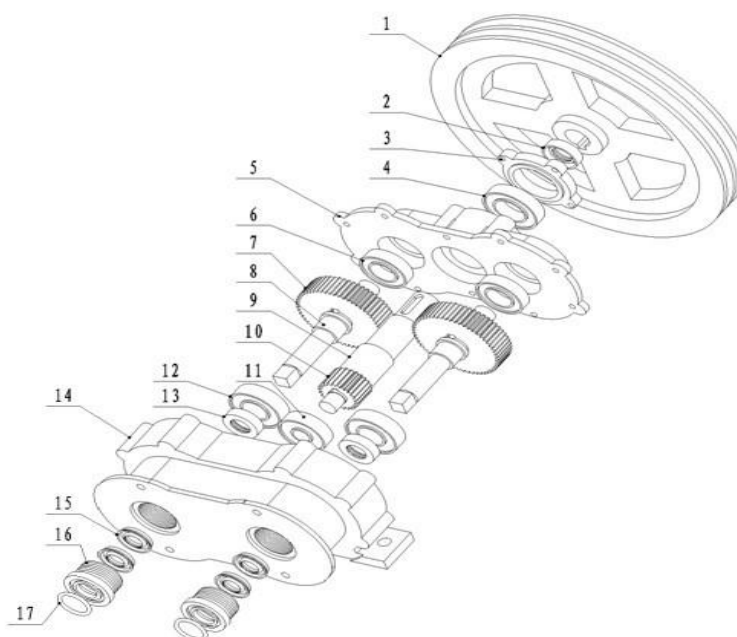
It is recommended that high quality ice cream mixes should always be used. Always make sure that the mixes is made by high quality raw materials or ingredients from reliable or trustworthy suppliers, so that the over-run rate and taste taken on from this machine can be farthest approved.

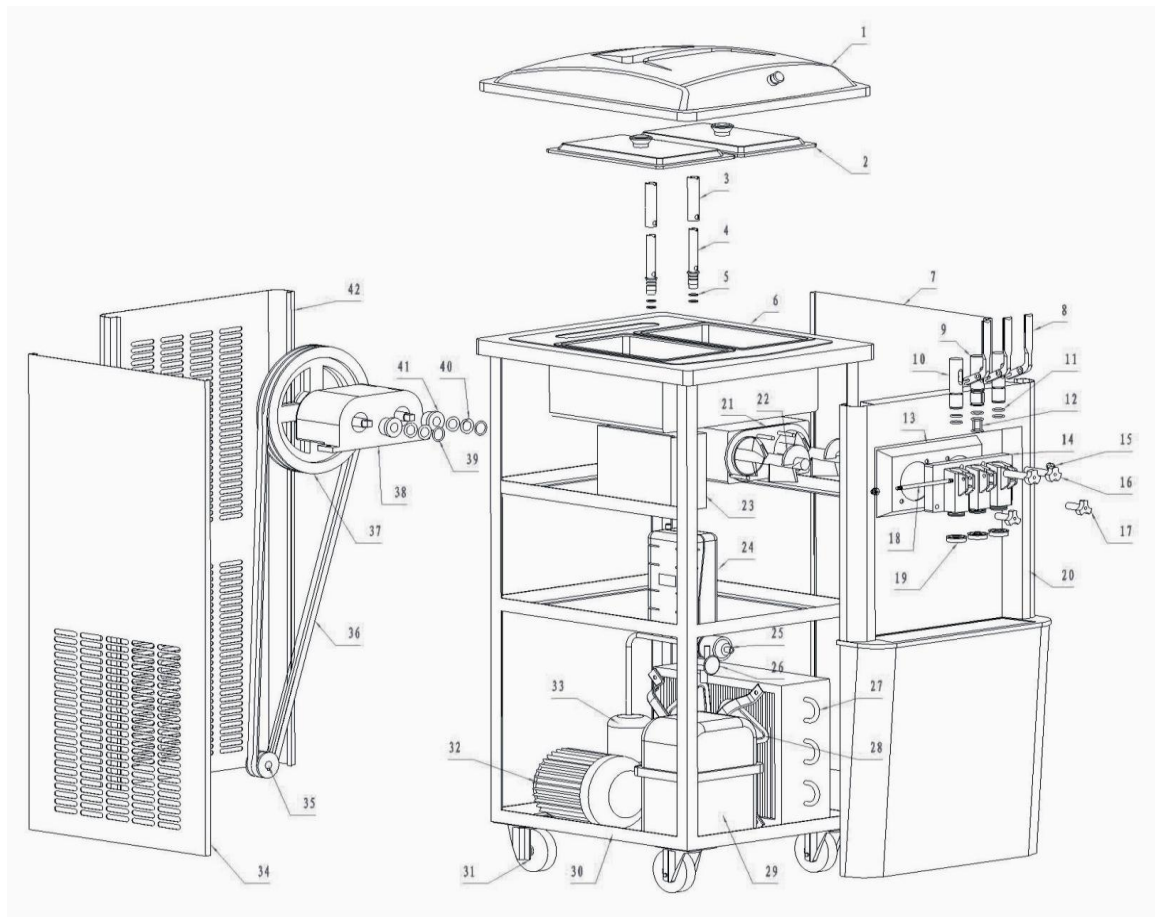
**Note:**

- Always follow the instruction given by the supplier.
- When using the ready-to-use ice cream mixes which goes with stipulated proportion mixing water, do not try to add more water or sugar, since this may lower the quality of the product or disturb the operating condition of the machine.
- Always remember to sanitize the machine after it has been used, and always keep a strict hygiene.
- For best customer satisfaction, always taste the product before serving so you are always sure that you will provide the customer with a first class product

4. Machine Assembly Identification**Caption A**

- | | |
|---|--|
| A1. Strap Wheel | A2. $\phi 45 \times 30 \times 10$ Seal |
| A3. Seal Cover | A4. #106 Bearing |
| A5. Gearbox Cover | A6. #105 Bearing |
| A7. Big Gear | A8. Square Shaft |
| A9. Main Shaft | A10. Small Gear |
| A11. #303 Bearing | A12. #205 Bearing |
| A13. $\phi 35 \times 20 \times 10$ Seal | A14. Main Gearbox |
| A15. Y- Ring | A16. Seal Nut |
| A17. O- Ring | |

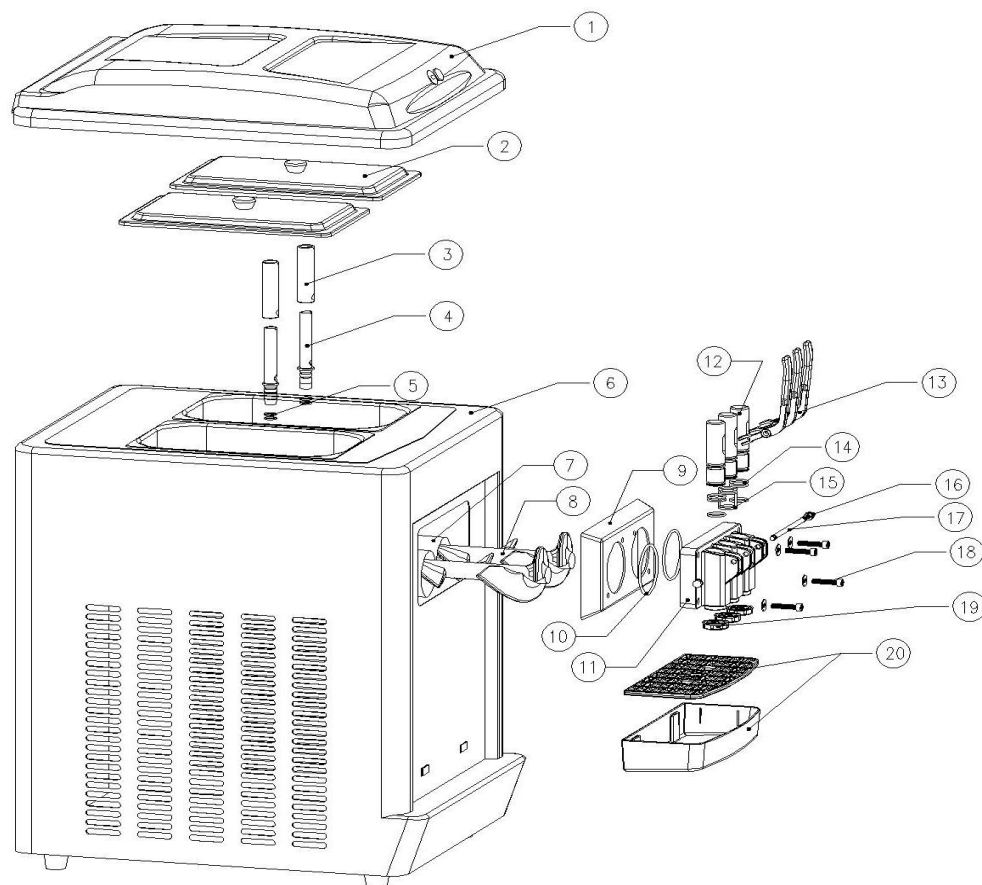
**Drawing A: Gearbox Interior View**



Drawing B: Floor-standing Models Interior View

Caption B

- | | |
|-------------------------------------|-------------------------|
| B1. Top Cover | B2.Hopper Small Cover |
| B3. Expanded Outer Tube | B4.Expanded Inner Tube |
| B5. $\phi 16$ O-Ring | B6. Hopper Panel |
| B7. Right Side Panel | B8.Handle |
| B9. Middle Plunger | B10.Side Plunger |
| B11. $\phi 26$ O-Ring | B12.Bridge Seal |
| B13. Decorative Plate | B14.Throat Block |
| B15. Cover Nut | B16.Manual Screw (Long) |
| B17. Manual Screw (Short) | B18.Horizontal Bar |
| B19. Star Outlet | B20.Front Panel |
| B21. Cylinder | B 22.Beater Shaft |
| B23. Circuit Box | B 24.Compressor Starter |
| B25. Dryer | B26.Expansive Valve |
| B27. Condenser | B28.Fan |
| B29. Compressor | B30.Frame |
| B31. Casters | B32.Motor |
| B33. Filter (Air/Liquid Segregator) | B34. Left Side Panel |
| B35. Motor Strap Wheel | B36.Strap |
| B37. Gearbox Strap Wheel | B38.Gearbox |
| B39. Gearbox O-ring | B40.Gearbox Y-ring |
| B41. Seal Nut | B42.Rear Panel |



Drawing C: Table Top Models Interior View

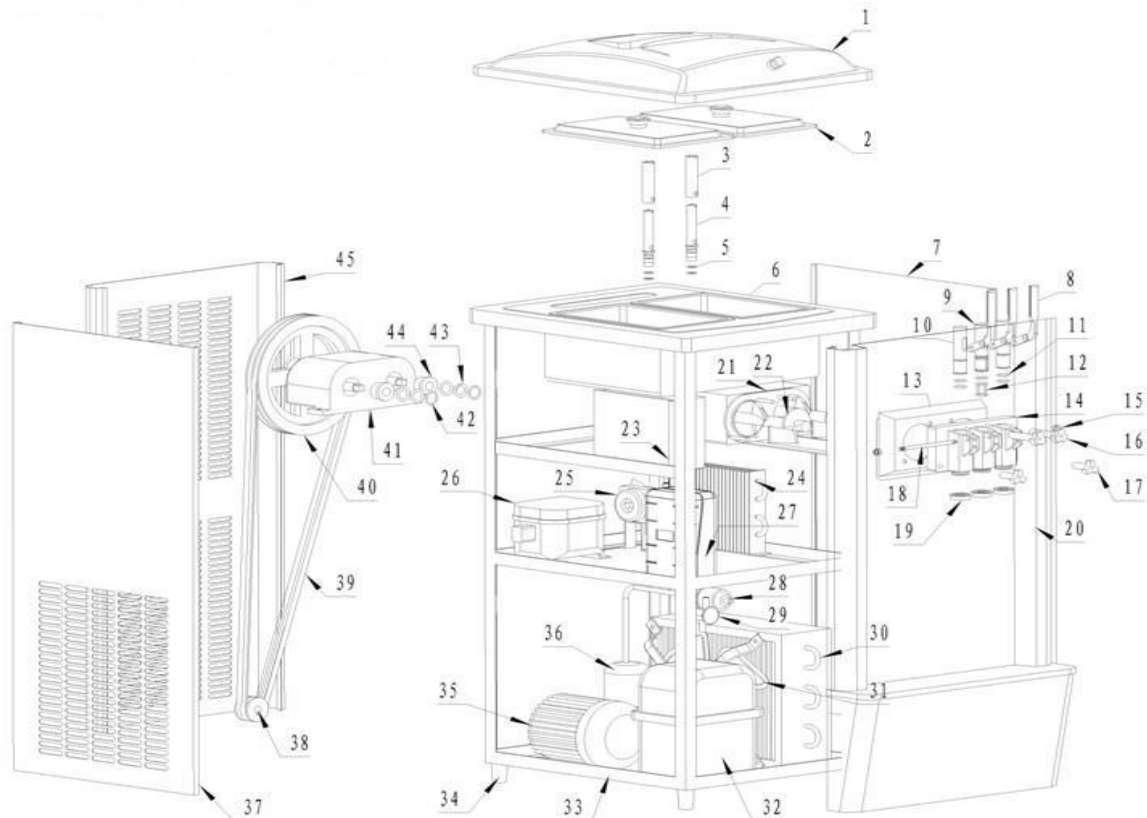
Caption C

- | | |
|-------------------------|-------------------------|
| C1. Top Cover | C2.Hopper Small Cover |
| C3. Expanded Outer Tube | C4. Expanded Inner Tube |
| C5. $\phi 16$ O-Ring | C6. Hopper Panel |
| C7. Cylinder | C8.Beater Shaft |
| C9. Decorative Plate | C10. $\phi 88$ O-Ring |
| C11. Throat Block | C12.Plunger |
| C13. Handle | C14. $\phi 26$ O-Ring |
| C15. Bridge Seal | C16.Cover Nut |
| C17. Horizontal Bar | C18. Manual Screw |
| C19. Star Outlet | C20.Drip Tray |

Caption D

- | | |
|-------------------------|------------------------|
| D1. Top Cover | D2.Hopper Small Cover |
| D3. Expanded Outer Tube | D4.Expanded Inner Tube |
| D5. $\phi 16$ O-Ring | D6. Hopper Panel |
| D7. Right Side Panel | D8.Handle |

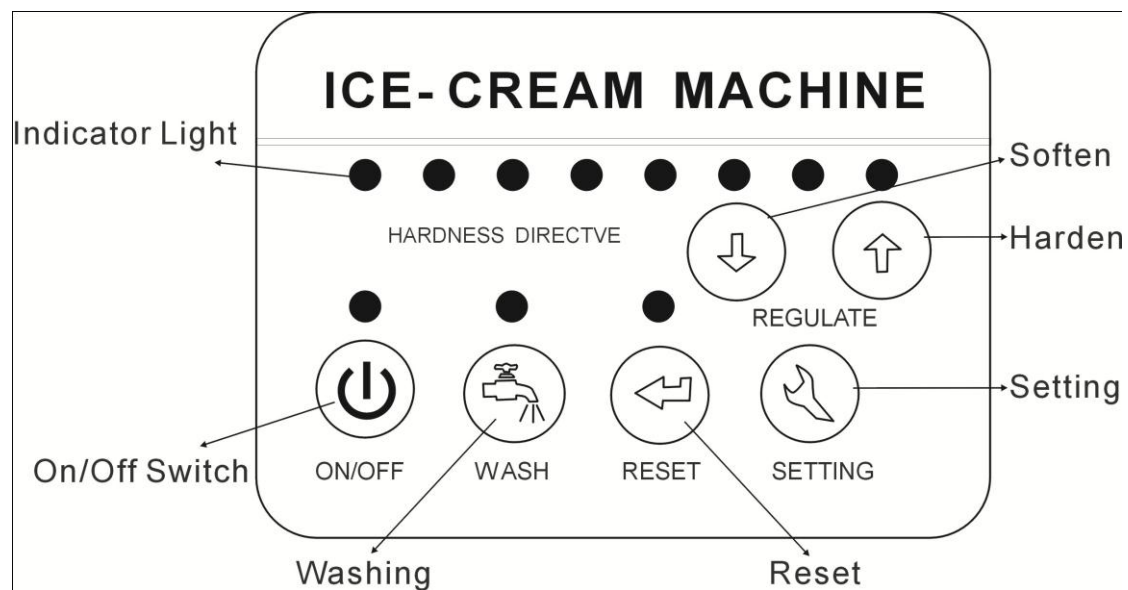
- | | |
|---------------------------|------------------------------------|
| D9. Middle Plunger | D10.Side Plunger |
| D11. $\phi 26$ O-Ring | D12.Bridge Seal |
| D13. Decorative Plate | D14.Throat Block |
| D15. Cover Nut | D16.Manual Screw (Long) |
| D17. Manual Screw (Short) | D18.Horizontal Bar |
| D19. Star Outlet | D20.Front Panel |
| D21. Cylinder | D 22.Beater Shaft |
| D23. Circuit Box | D24.Small Condenser |
| D25. Small Fan | D26.Small Compressor |
| D27. Compressor Starter | D28.Dryer |
| D29. Expansive Valve | D30.Condenser |
| D31. Fan | D32.Compressor |
| D33.Frame | D34.Foot |
| D35.Motor | D36.Filter (Air/Liquid Segregator) |
| D37. Left Side Panel | D38.Motor Strap Wheel |
| D39.Strap | D40.Gearbox Strap Wheel |
| D41. Gearbox | D42.Gearbox O-ring |
| D43. Gearbox Y-ring | D44.Seal Nut |
| D45. Rear Panel | |



Drawing D: Pre-cooling (keep-fresh) System Interior View

5. Control Panel Demonstration

(1) Electronic Easy IT pad Controller



- **Indicator Light** — Shows hardness level as well as production process
- **On/Off Switch** — Stop command for washing/production , Production Switch On
- **Wash** — Washing (motor running only)
- **Reset** — Validate the restart before the automatic move
- **Setting** — For hardness level regulation

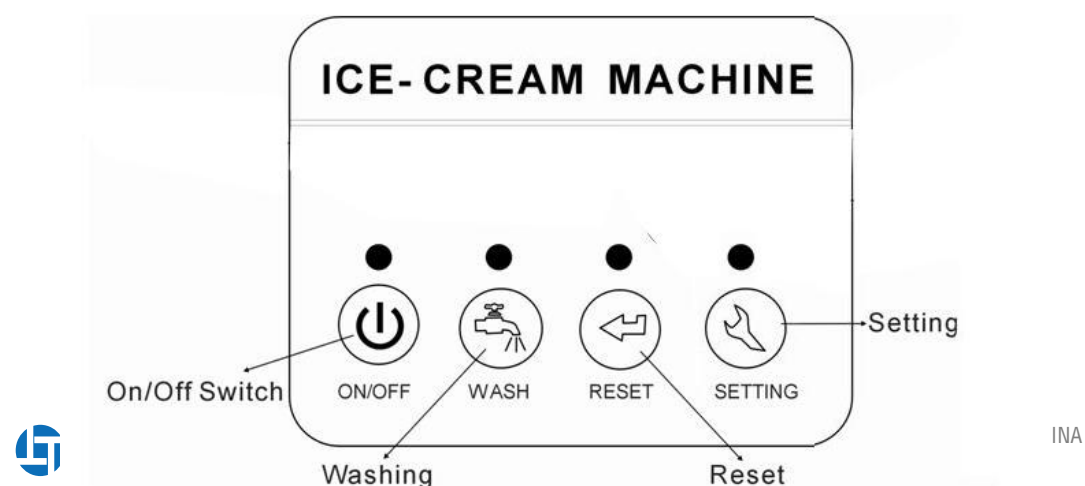
Warning:

The suggested hardness level to be adjusted as per normal surroundings 28 °C , should be the fourth or the fifth.

Adjust the ice cream to be harder only if the ambient temperature becomes higher.

Adjust the hardness to be too high lastly would cause damage to the scrape or even the motor.

(2) Simplified 4 buttons Controller



INA

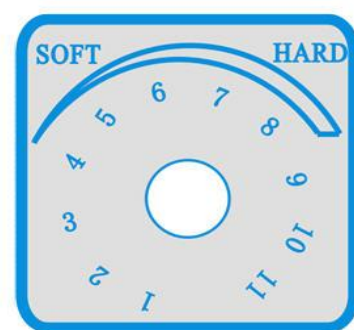
- **On/Off Switch** — Stop command for washing/production , Production Switch On
- **Wash** — Washing (motor running only)
- **Reset** — Validate the restart before the automatic move
- **Setting** — For hardness level regulation

Note:

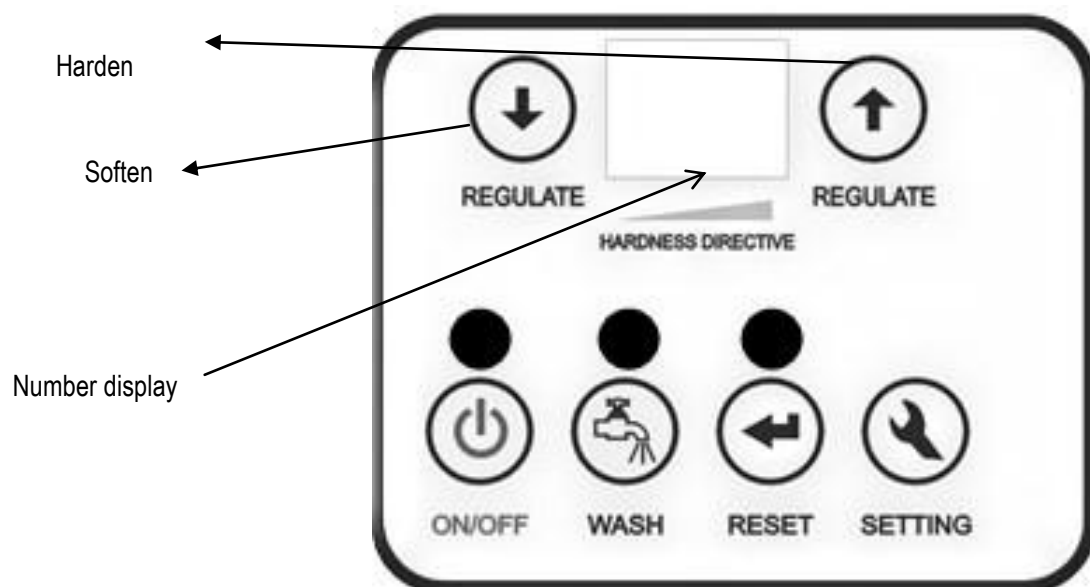
- The Simplified 4 button electronic controller comes without the hardness digital regulator and production process indicator, comparing to this above controller.

- (3) Consistency/Hardness Regulation for the simplified 4 button electronic controller.

The consistency Controller (refer to the image on the right) is Installed on the Side Panel



- (4) Number Display Electronic Controller



- **On/Off Switch** — Stop command for washing/production , Production Switch On
- **Wash** — Washing (motor running only)
- **Reset** — Validate the restart before the automatic move
- **Setting** — For hardness level regulation
- **Number Display** — Shows hardness level as well as production process

6. Operation Condition

The operation requirement for the equipment is as bellows:

- Voltage 220 V (190V~245V)
- Operating air temperature 5 °C – 48 °C
- Max relative air humidity 90 %
- Max height above sea level 2000 m
- Normal atmospheric condition

7. Noise

The noise level is normally bellow 55 dB which varies from model to model.

INSTALLATION

1. Room Conditions

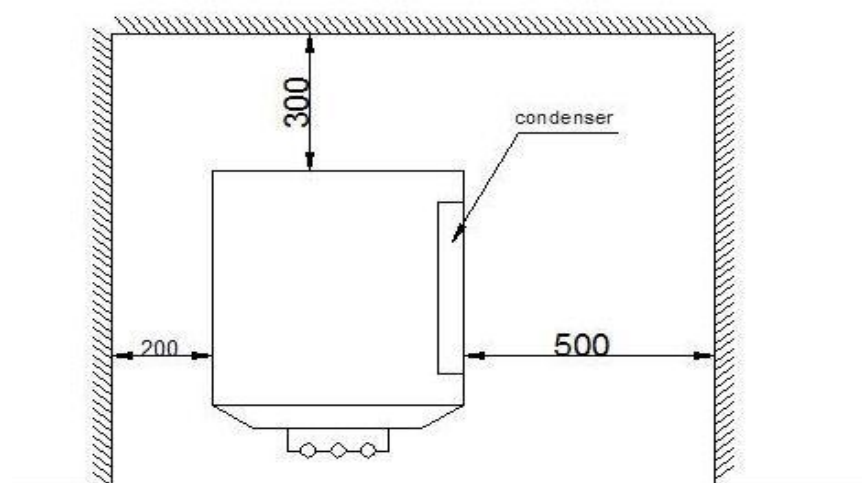
The room used for the operation of the soft ice cream machine must be able to provide air that can circulate freely, to prevent over-heating. Therefore the distance from the machine to the wall must be at least 200 mm to the closest wall. It is better to leave no less than 500mm for the ventilation side.

The space where the machine is located should be kept clean, in order to prevent dust or other particles to be sucked into the machine by its fan.

The place where the machine stands should be firm and dry and there should not be any heat sources within 500 mm to the machine.



NOTE: If the minimum room condition is not followed, it may affect the operation of the machine and its output capacity.



Picture for Instruction of Machines Placement

2. Electricity Connection

It is of great importance that the power supply to the machine is within the permitted range 190V~245V, with a current capacity above 16 A, also that the machine can be properly grounded. If the voltage should be outside the permitted range, then the machine safety protection will prevent the machine to start and the machine need to be restarted. The cross-section area of the cable that is connecting the machine with its power source should be over 2.5mm^2 and the length shorter than 6m.



Warning: if the power cable should of any reason be damaged, a skilled technician with sufficient knowledge and skill should immediately replace it.



Warning: Always ensure that socket of the power source is properly grounded before connecting the machine.

3. Accessories Installation

IMPORTANT:

Remember to clean the soft ice cream machine and its parts before using the first time you start to use the machine

(1) Beater shaft and throat block Installation

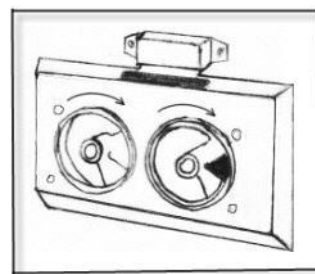
(a) Manually loosen off the plastic/stainless steel screws to take down the throat block. Disassembly all the parts including horizontal bar, bolts, and the gaskets.

Prepare a container (pan) of sanitary water. Put the assembly into the water and clean it one by one to get rid of any dust or dirt as well as the lubricating oil.

(b) Take out the stell beater shaft from the cylinder by pulling & slight rotating. After washing the shafts, insert the beater shaft assembly back into the chilling cylinder.

Make sure there is clear without any dirt or stuff.

After installing the beater shaft, turn on the machine without the throat block; inspect to make sure that the rotating direction is always clock-wise.



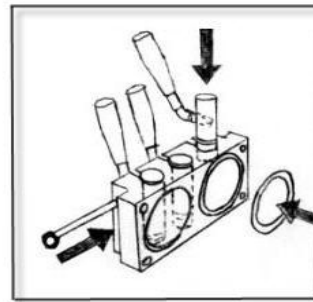
(c) Assemble the throat block:

- Insert the plunger and make sure it is properly installed because the middle plunger is different from the other two.

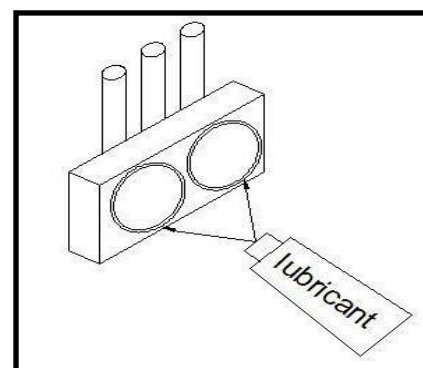
- Make sure the plunger with square sealing always in the middle.

- Insert the horizontal bar to make the plunger place and finally put the O-ring on its place.

- Check to see if the O-ring sealing is in good condition because any inaccurate location would cause unexpected liquid leak.



Put a thin layer of lubricant oil on the plunger and the O-rings which is for sealing the throat block with the machine.



To attach the throat block to the machine, use its body to press up the three springy touch plunger.

Finally aim so that the four holes on the throat block body fit into the four screws on the machine.

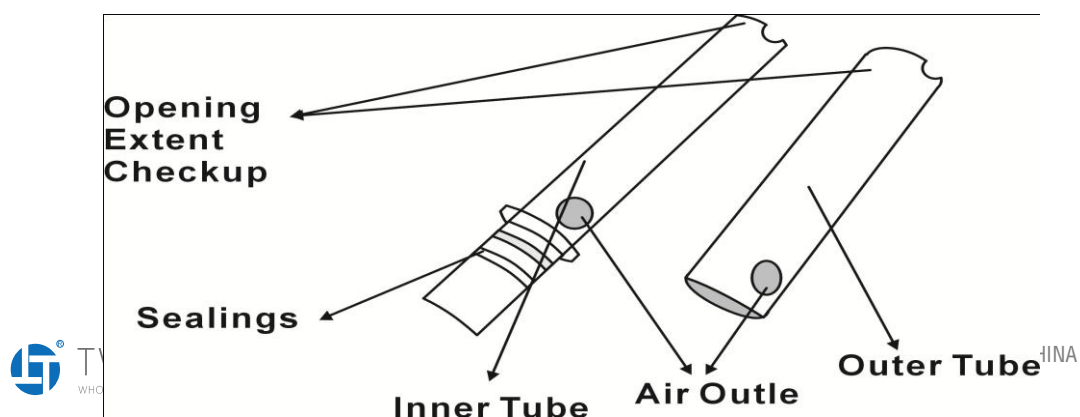


Make sure the O-ring gasket is located well completely without any shift. Also the cylinder peak must touch well with the O ring sealing otherwise the gasket may be torn down or finally causes leakage.



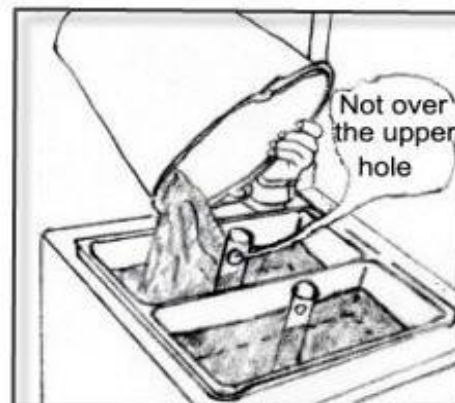
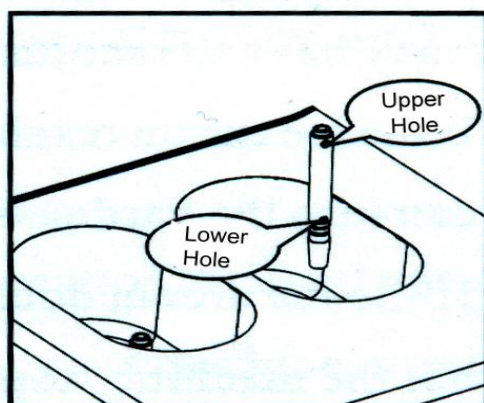
Carefully insert the middle plunger into the hole. The gasket is different from the other two, please turn the plunger sideways before the insert. This is to protect the gasket from pressing to tear because the silicon material is weak.

(2) Expanded Tube Installation



Instructions of using the expanded tube:

- Sleeve upper tube into the lower tube to make the holes connective with each other.
- Press it to make it inserting into the hole of hopper.
- Control the feeding by adjusting the air outlet. It is recommended that it is good for high over-run to feed only 1/3 of the chilling cylinder and leave the outlet 1/3 open so that not only enough space for expansion can be guaranteed, but also the cylinder can be well re-supplied.



After pouring enough the ice cream material and adjusting well the air outlet, cover the hopper so as to keep the material clean from dust as well as preserving the cold temperature.

OPERATION INSTRUCTION

1. Processes Before The First Operation

- (1) Clean the throat block
- (2) Clean up the hopper
- (3) Clean up the cylinder and beater shaft

2. Trial Running

After properly installing all the accessories, a trial running before ice cream production must be carried out to ensure everything is in good condition.

- (1) Press **CLEAN** button, the motor starts and the beater rotates via transmission. Press **STOP** button, the motor stops and the beater halt accordingly.
- (2) Press **PRODUCTION** button, the machine enters into refrigeration mode. The beater motor starting running first while within 10 seconds, the fan, compressor, condenser starts respectively. Hot air is discharged from the ventilation holes on the side panel. The

temperature of the chilling cylinder drops down shortly and gradually which turns out to be frosty in no more than one minutes. Please **STOP** button,. The whole unit stops.



Caution:

Remove the beater shaft from the chilling cylinder without any ice cream material and the trial running is not allowed for more than 3 minutes because in that case the refrigeration takes too long and the chilling cylinder would be too frosty that might cause damage to the shaft.

3. Ice Cream Production

(1) Pour the ready ice cream mix into the two hoppers.

Turn the air outlet open to make the feeding into action till the chilling cylinder is filled.

(2) Let the ice cream mix free to flow deeply for 2 minutes

and then press the **ON/OFF** button. The motor starts first and within 10 seconds other electrical components follows up and the whole machine will go into production mode. The ice cream can be finished in 3 to 8 minutes which varies from models. (For the first batch, the production time is normally around 6 to 12 minutes)

(3) Draw down the handles on the throat block to

make dispense. Every time when drawing the handle, the motor and beater will start to pull the ice cream out by the forces of helicity. The left and right discharge outlets at the bottom of the spigot are related respectively to the left and right chilling cylinder from where you can dispense your optional flavor of ice cream. The middle outlet is applicable to both of the chilling cylinder and thus it dispenses a mixed flavor of ice cream.



Caution:

Keep close attention to the material capacity in the hopper. Make sure the material will never be empty otherwise consecutive production would cause noise and even damage to the beater. Check the material capacity through the visual inner cover from time to time and re-supply accordingly if necessary.

(4) As soon as the ice cream reaches to the stipulated hardness, the **OVERLOAD** indicator will be switching on and the production will stop automatically. The production restart in 7 minutes. During this period, if it is required to continue producing ice cream without waiting, press the **RESET** button to for immediate restart.



Caution:

If it is not necessary for dispensing ice cream even if the hardness is achieved, do not push the **RESET** button frequently otherwise the ice cream inside may possible becomes too hard to serve, and also it is a waste of electricity consumption.

(5) Consistency (Hardness) Adjustment

The general principle of hardness control is based on the fact that the motor current increase as the loading grows. When the current reaches up to the stipulated rate, the control circuit reacts and stops the production.

Normally a proper rate of hardness is pre-set up in factory before delivery. If an optional rate of hardness is required, please adjust the rate on the control panel or the knob.

For electronic controller which includes IT pad for hardness adjustment, press - to soften the ice cream and respectively press + for hardening.

The Specific process is as below:

(a) Press **SETTING** button for three seconds, the **HARDNESS** indicator flashes to show its current hardness rate.

(b) If the ice cream is too hard from the preferable taste, press - consecutively till it reaches to the favorite softer rate and then press **SETTING** again to save.

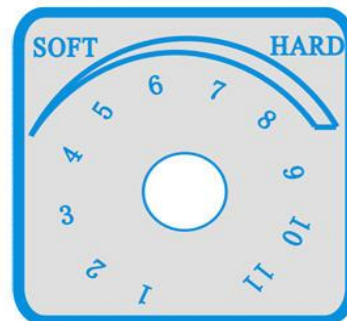
(c) If the ice cream is too soft from the preferable taste, press +consecutively till it reaches to the favorite harder rate.

(6). After confirming that the proper hardness rate, press **SETTING** button to save the rate.



Wait for approximately one minute for each step mentioned above before implementing the next step, otherwise it may not completely go through the expected effect.

For the simplified electronic controller
or the traditional controller,
please rotate the knobs as the
right image to select
your preferable hardness.



If the ice cream reaches up to the required hardness but the production is still working, please adjust the hardness to **SOFT** tag to stop the production.

If the production stops without reaching up to the required hardness, it is caused by **OVERLOAD**. Please adjust the hardness to **HARD** tag to restart the production. The production automatically stops again when ice cream being harder so that the machine will not happen to be "**FROZEN CYLINDER**" which harms the beater and compressor.

CLEANING & SANITIZING

1. Cleaning

Notice

In order to ensure that the machine is clean, before it is used the first time its parts need to be sanitized and washed. The cleaning process is also necessary as a daily routine after soft ice cream production has been done or if the machine has not been used for a long time.



WARNING:

Before disassembling any parts, always remember to stop and unplug the machine.

IMPORTANT:

Because this is a food-producing machine, always remember to keep good hygiene and to wash and sanitize all parts that have been in contact with the product after the machine has been used.

After the cleaning process is done then the parts should be rinsed with bacteria- free drinking water and thereafter dried.

The temperature of the **water** used during cleaning, should never exceed **40 °C** since it may cause damage to the plastic parts and seal in the machine.



INFORMATION

To prepare sanitizing solution you need to:

1. Fill a 5 L container with water.
2. Pour one bag of sanitizer into the water.
3. Mix the solution for 2 minutes or until all the sanitizer is dissolved.
4. The sanitizing solution is ready to be used.



Always remember to be careful while handling the sanitizing powder or solution, since it may cause personal injury or irritation if inhaled or if it get in contact with sensitive parts of the body (like the eyes).

2. Daily cleaning

Mildew and bacteria can thrive and multiply rapidly in fat mixture contents, therefore cleaning and sterilizing must be carried out as above mentioned with utmost care.

All stainless steel materials used for parts in contacts with mixture and ice cream are easy to clean but do not prevent the proliferation of mildew if not cleaned sufficiently.

(1) Sanitize and clean the hoppers and the cooling cylinders

(2) Sanitize and clean the throat block

a. Disassembly the throat block with the metal key accompanying with the machine package.

b. Put the block into detergent liquid or water. Rise and drop several times and especially to clean up the gaskets, plunger and sealing.



Caution:

Too hot water could damage the special materials of the machine such as the silicon gasket.

3. Sanitize and clean the beater assembly

- (1) Pour water into the hopper while the throat block is fixed on, be sure the water is enough for cleaning.
- (2) Press the **WASH** button, the beater runs strongly for self-cleaning. After a few minutes, press the **WASH** button to turn off the beater and then take out the throat block slowly to pour out the miry water.

4. Clean the machine shell with a cloth drenched

in a sanitizer.

5. Clean the drip tray with water and sanitizer.

OPTIONAL FUNCTIONS

The below functions are selective. They are available only in unit models with key letters "H" / "P" / "C" / "M" / "R" / "T".

1. Keep-fresh System (Pre-cooling System)

For regular machine, the ice cream has to be cleaned up when the machines stop dispensing ice cream in night-time, otherwise the ice cream remainder inside the hopper and cylinder will melt or even get rot by the next morning.

This device is designed for convenience and feasibility of keeping ice cream over-night inside the machine without any cleaning.

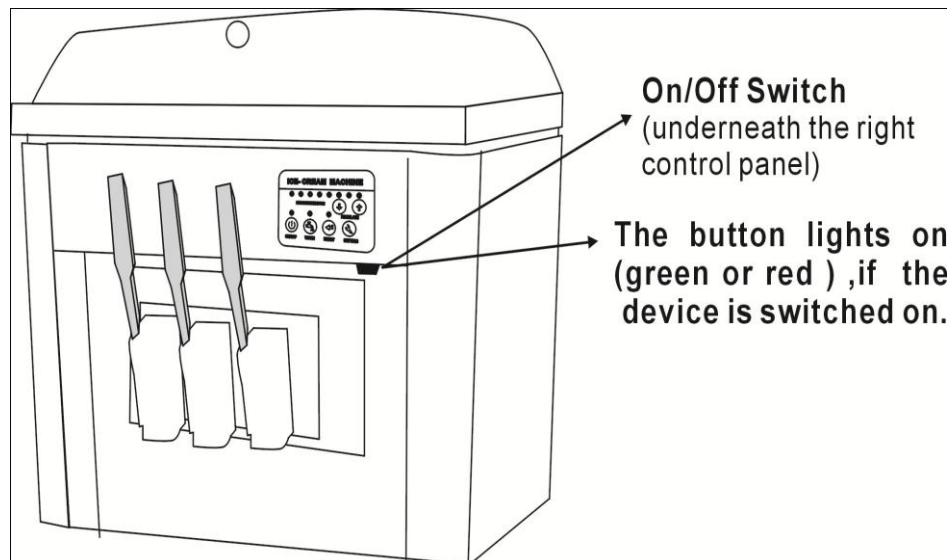


About How To Use This Function:

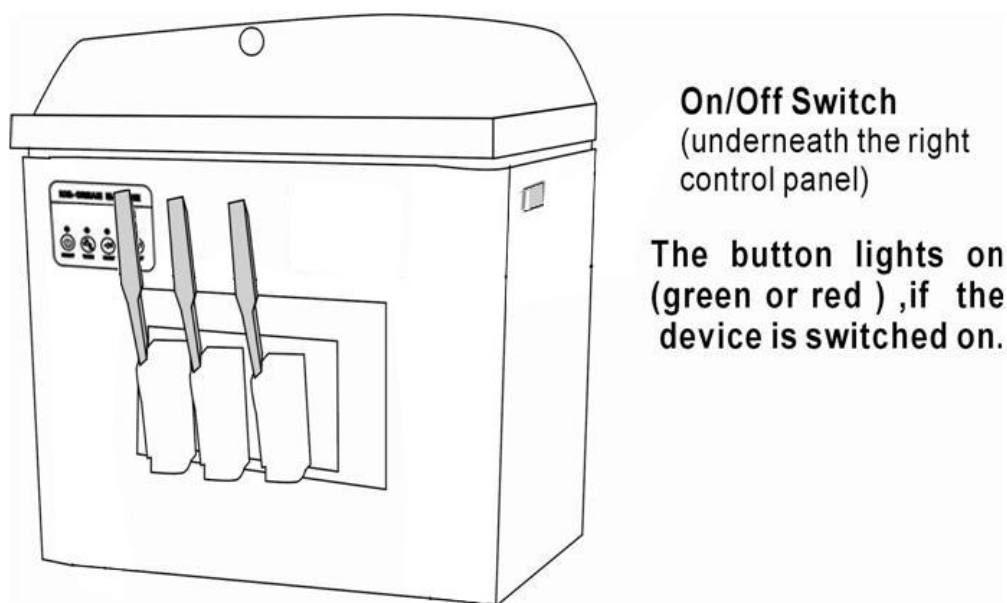
- (1) Use this function during the daytime when the machine is running for business, it can be capable of promoting the output capacity as the material mix becomes cooler and then it shortens the production time.
- (2) Use this function during the nighttime when the machine is not running for business, it can be capable of refrigerating the hopper & cylinder intermittently.

(3) If lower temperature is required, please take down the side panel and find the pre-cooling device box. Rotate the knob to regulate the preferable temperature.

NOTE: This function always use key letter “H”.



Location Of The Function Switch



Location Of The Function Switch



This function is not running always. Therefore it is not necessary to worry about high power consumption.
This function runs only when the hopper temperature is detected to be higher than the expected rate. As soon as the hopper is cold enough, the function automatically runs down.

2. Air Pump

This device is designed to pump air intermittently into the cylinder when the production is effected. It makes the taste of ice cream much better, saves the cost because of less mixture consumption. It works automatically when the unit is in PRODUCTION mode.



This function is not running always. To prevent the air injection from stopping the ice cream feed, the air pump generator runs intermittently (always 20 seconds running and 20 seconds halt).

NOTE: This function always use key letter “P”.

3. Counter

This device is designed to count ice cream quantity for daily sale. It displays the numbers of ice cream serving and counts the number up while each time the handle is being pulled down. With a lock, this device is convenient for shop management & accounting

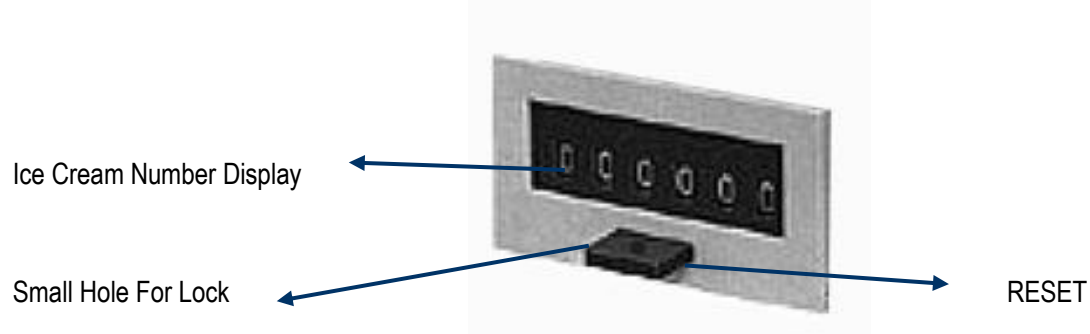


About How To Use This Function:

This device works when the unit is in PRODUCTION mode. It automatically counts the number up when the s/s handle is pulled down.

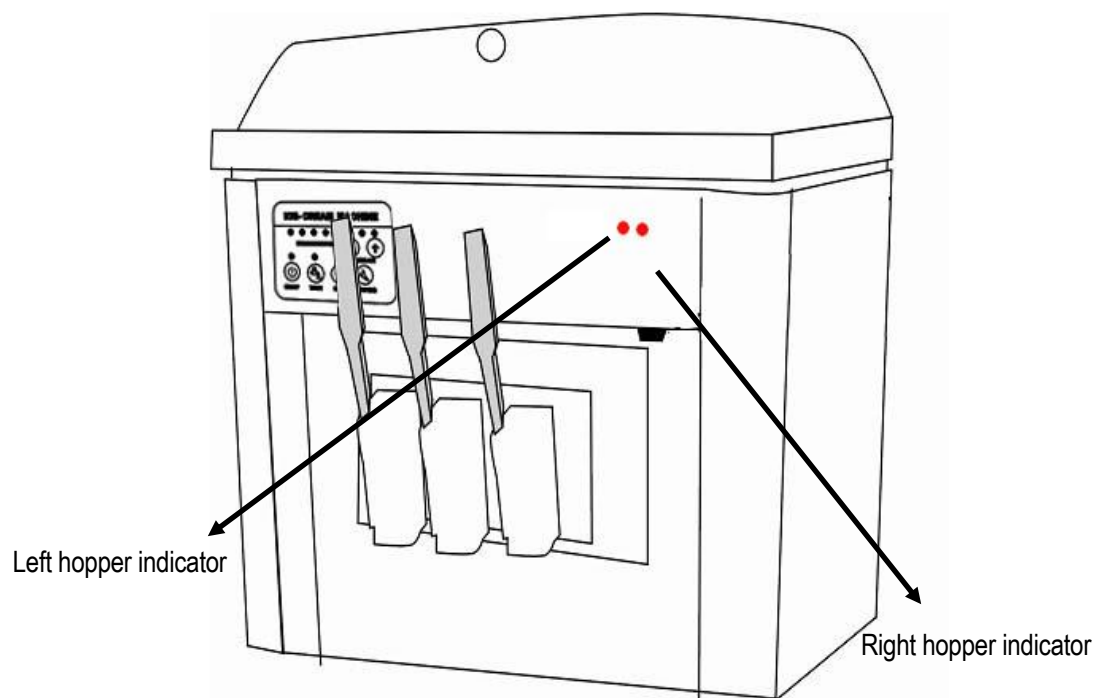
To reset the number, take off the lock and press the button.

To lock the counter, simply hang the lock up from the small hole of the RESET button.



NOTE: This function always use key letter “C”.

4. Mixture Alert



This device reminds user of the time to re-support ice cream mixture so as to avoid 'empty cylinder' and to guarantee consecutive feeding for consecutive ice cream serving. Once the ice cream mixture inside the hopper falls to the low limited level the stipulated indicator shines on.

NOTE: This function always use key letter "M".

5. Rainbow

·Clean before production

Before production please wash and disinfect the components, pipes, containers which contact with food components, pipes, containers.

·How to production

Connect to the power supply, press the rocker switch up (–), left light turns on, lift up the front up-down board of the ice cream machine, listen to the left rainbow pump whether it is working properly.

Then press rocker switch down (=), the right light turns on, listen to the right rainbow pump whether it is working correctly.

Then put down the front up-down board, press the rocker switch on middle position (O) to pending next step.

·Filter the jam

Filter the jam into smooth in order to avoid the jam block to plug into the hole. Also insure the jam with enough sugar percentage to prevent the ice jam blocks the ring groove and hole.

·Pump the jam

Put the filtered jam into two containers, placed in cabinets, and put the two suction tubes into the containers.

Press the rocker switch up (–), lift up the up-down board of the ice cream machine.

When the left rainbow pump pumps the jam into the discharge block, then press the rocker switch down (=). When the right rainbow pump pumps the jam into the discharge block, then put down the up-down board to stop pumps working.

When ice cream come out it would be with rainbow.

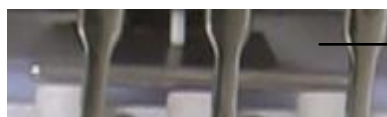
· Clean after production

Unplug the input tube which connects with discharge block, and lift up the suction tubes at the same time.

Put the suction tube into the container with clean water of about 40 °C.

Open the appropriate switch, lift up the front up-down board so that the pump works, until the pipeline can be out of all clean water.

Remarks:



UP-DOWN BOARD



ROCKER SWITCH

NOTE: This function always use key letter “R”.

6. Temperature Display



Shows the temperature of the cylinder

NOTE: This function always use key letter “T”.

TROUBLESHOOTING

1. Analysis table (1)

Problems	Reasons	Possible Causes	Solutions Suggested
Refrigeration Is Disable	1.The compressor does not run	A. The starter or Capacitor breaks down. B. The overload protection is defective C. Power voltage is too low or the section area of the electric cable is too narrow that it Causes low voltage.	A.B. Change the new ones C. Contact the local power supply station for more details or match a Unit of regulator. Change a new cable for a large section if it is caused by The cable.
	2.The chilling system is blocked by ice	Moisture exists	Clean up the moisture
	3. Leakage of refrigerant gas	The chilling system is not completely/properly sealed.	Check up the leakage and repair accordingly by vacuuming and refilling refrigerant gas.
Ice cream is not hard enough even though it is already regulated to be the hardest rate.	Refrigeration is too weak	A. Refrigerant gas is lacking (not enough) or not re-filling enough. B. The machine has been used for a long time. The leakage is over normal annual volume.	Refill the refrigeration system with the corresponding gas type. The volume to be refilled must comply with the amount indicated on the compressor plate sheet. Repair the leakage before refilling
	Improper evaporating temperature of the refrigerating	The thermal expansion valve is not properly adjusted	Adjust the valve so that the evaporating temperature to make it in best state.

2. Analysis table (2)

Problems	Reasons	Possible Causes	Solutions Suggested
Leakage of the ice cream stuff or water	1. Leakage from the throat block	A. The gaskets on the plunger or the sealing O-ring is not properly installed, or not well in location, or has been already defective.	Change some new gaskets or sealing.
		B. The fixing screws on throat block are not tight enough or not properly mounted	Mount the screw in proper position and tighten it up.
	2. Leakage from the gear box	The Y-ring or O-ring sealing is defective or broken down	Change some new gaskets or sealing.
The ice cream is not able to discharged.	The ice cream is too hard	A. The ice cream material involves too much proportion of sugar B. Improper overload proof adjustment	A. Use the ready-to-use material from good supplier or adjust the proportion of recipe B. Turn to the professional repair man for the adjustment of the overload proof
	The beater shaft does not rotate	A. Motor is broken down B. The control circuit is defective C. The transmission belts are too loose. D. The gear box is defective.	Repair or change the damaged parts
	Improper Operation	The front section of ice cream in the chilling cylinder is hard while the left part being too soft.	Make sure that material inside the cylinder is feed equably before starting the run the machine.

CIRCUIT DIAGRAM

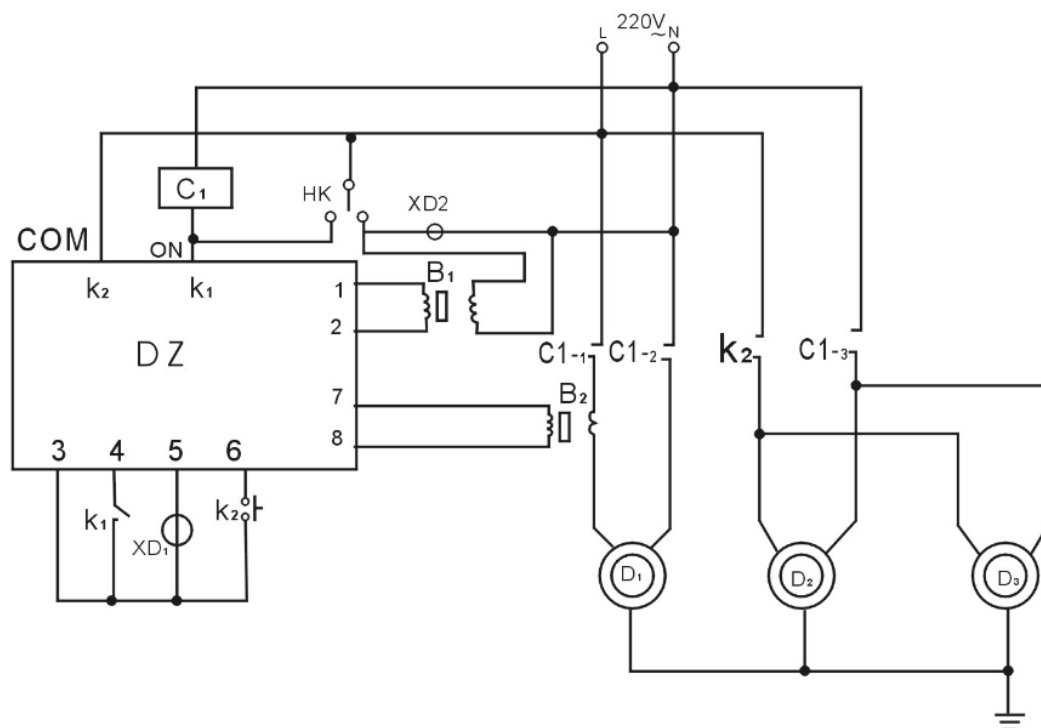


Diagram of the 220V knob controller machines

- DZ — Electronic Circuit board
- HK — Command Switch
- K1 — Travel Switch (Limit Switch)
- K2 — Reset Switch
- B1 — Main Transformer
- B2 — Current Sensor
- XD1 — Overload Indicator
- XD2 — Production Indicator
- D1 — Stirrer Motor
- D2 — Compressor
- D3 — Fan Motor
- C1 — Alternating Contactor



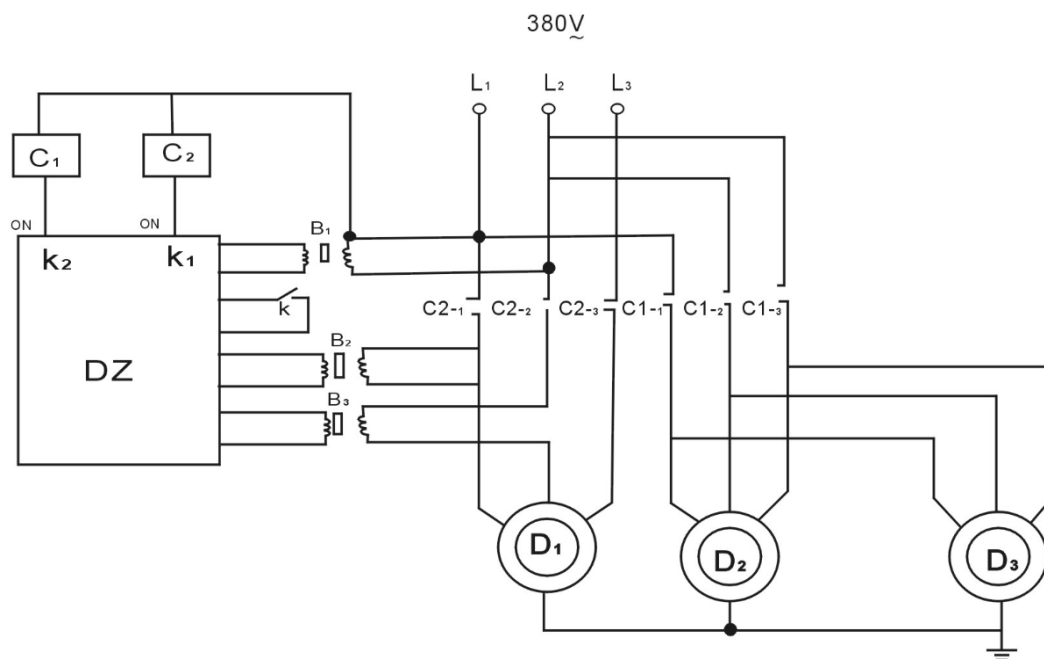


Diagram for the 380V simplified controller machines

DZ---Electronic circuit board

K-----Travel switch (limit switch)

B1----Main transformer

B2, B3----Current sensor

C1, C2----Alternating contactor

D1----Stirrer motor

D2----Compressor D3----Fan motor

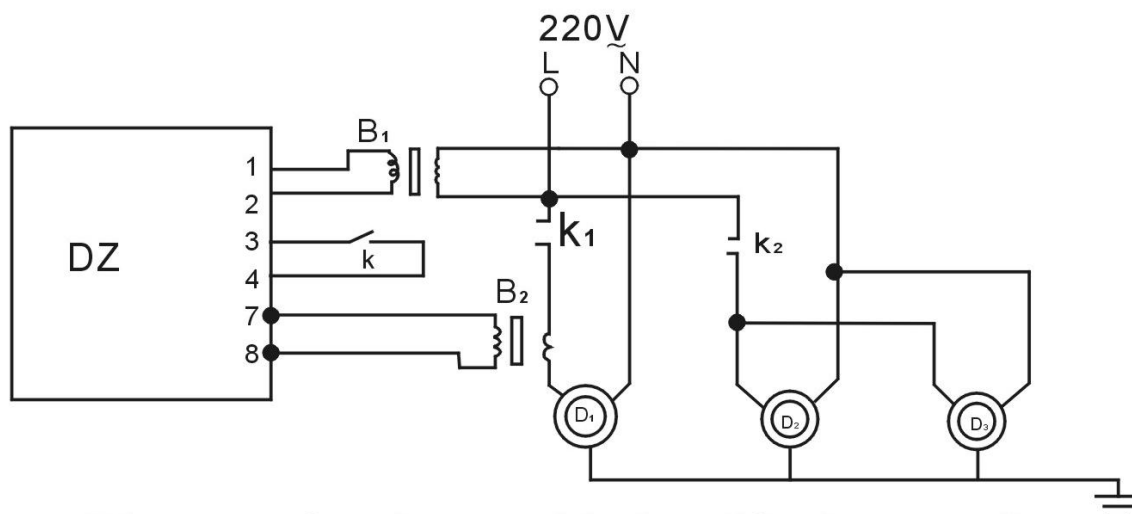


Diagram for the 220V simplified controller machines

DZ-----Electronic Circuit Board

K-----Travel Switch (Limit Switch)

K1, K2-----Direct Current Relay

B1-----main Transformer

B2-----Main Sensor

D1-----Stirrer Motor

D2-----Compressor

D3-----Fan Motor

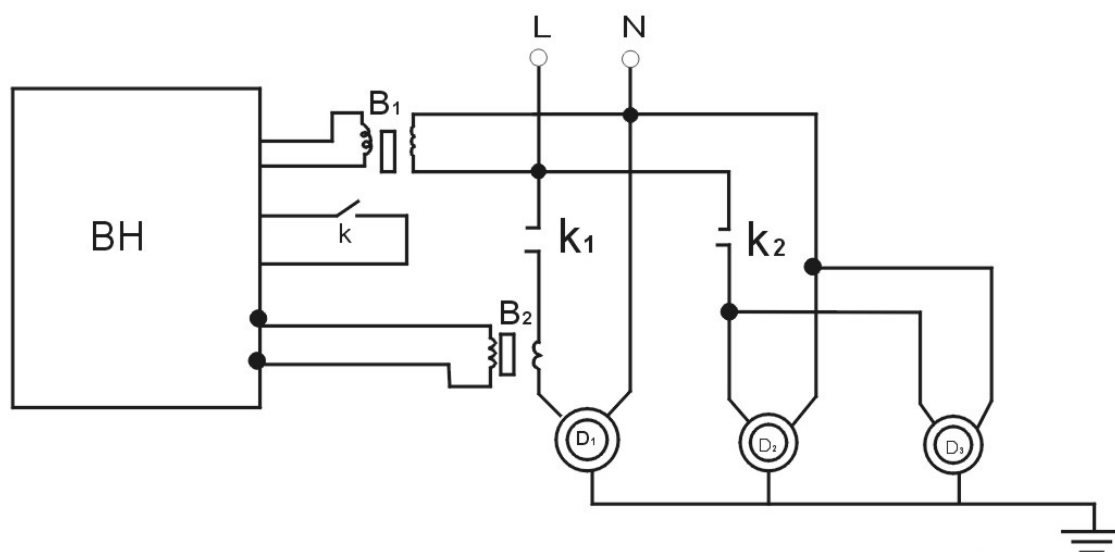


Diagram of the 220V computer controller machines

BH — Computer Controller

K — Travel Switch (Limit Switch)

K1, K2 — Direct Current Relay

B1 — Main Transformer

B2 — Main Sensor

D1 — Stirrer Motor

D2 — Compressor

D3 — Fan Motor





Caution:

The above drawing and information are for reference only. They are subject to change as per production renovation necessity.

For the accurate diagram for any fixing or maintenance, please refer to the sticker on the circuit box cover.

ACCESSORIES PACKAGE

1. 4 PCS ϕ 26 O-ring for side plungers
2. 1 PCS ϕ 26 O-ring and 1 PCS bridge gasket for middle plunger
3. 2 PCS ϕ 88 O-ring for throat block
4. 4 PCS ϕ 16 O-ring for expanded tube
5. 2 SETS of expanded tube

(The above list is for reference only. The actual breakdown may vary as per different customer's request)

Caution: Keep the children away from the machine to avoid any danger to the children.